

CLAIMS

1. Device and process for application of an authorization, determination, designation,
location as well as locking and theft proofing system of a loop that can be
5 (intentionally and unintentionally) locked or encrypted with a lock, a locking
algorithm, or an encryption mechanism or one or more lockable or encryptable
loops that can be locked or encrypted with none, one or several locks, where each
loop and each lock (also as a unit) carries one or more (temporal, variable or coded
biometrically individually digitally cryptographically encryptable) numeric,
10 alphanumeric, auto number or bar code that can be registered on the internet, on
another (private, public, governmental or police) network or another data bank or
on a mobile phone portal, or several numbers which have interactive information
indices and radio functions and which, in the case of theft, criminal or unauthorized
or undesired (criminal) influence, triggers an (alarm) signal and can also be used or
15 mounted on chains or locks themselves, (motor) vehicles or bicycles (through the
spokes, hubs, gear changers, etc.), kickboards, ski ties, cars, boats, aircraft, houses
or boxes and cassettes or (hand) guns, computers, mobile telephones, laptops, TVs,
projectors, (electronic) instruments, also especially cables, watches, clothing,
(chastity) belts and naturally humans, animals (legs), and plants and can be
20 equipped with an electrical circuit with a connection or interruption to electrical
(switching) devices and can also carry one or more transmitters, transponders,
transmitters, SIM cards or radio chips which give a signal to the number registered
on the internet or receive it from the internet or from a cell phone/PDA and, e.g.,
are integrated in a screw head, nut, nail, needles, threads, knobs and/or as (theft)
25 security system for a safety tie/link etc., that is provided on an upper and/or lower
part with a loop which is locked as (theft, misappropriation, data) protection with a
lock in such a way that after the destruction of the loop the top part can no longer be
joined with or attached to the bottom part (motors can no longer be installed in or
removed from the chassis, in which case a loop is a material or information circuit

also through photoelectric barriers or magnetic or electric potential fields and also means local, temporal or legal etc. loop regions or zones or combinations of these.

2. The alarm is actuated upon the destruction of the loop as well as in the case of interruption of the power feed of the transponder (the cell phone SIM card) or a feed meter.
3. The loop has a bright luminous coating. The number of the loop is engraved with a 1 mm or 0.5 or 0.3 or 0.1 or 0.05 or 0.03 or 0.001 mm laser (penetrating or not) or is identified clearly recognizably by a Lock-Loop (TM, trademark) symbol.
4. The loop can be locked or opened and/or serially or in-parallel locked/encrypted/coded and/or arranged in a combination with (a screw and/or nut with) a lock with a loop or lock itself.
5. The lock can be mounted and/or be used through, on, in, at, for, instead of the loop and vice versa. The numbers can be locked themselves, coded, blocked or made invisible.
6. The fixation of the Lock-Loop DSS to the different products with screws, rivets, cables etc. always takes place with a square 4x4 or 3D connection system with 1 cm, 2 cm etc. side spacing.
7. The numbers, the loops, the transponders are all subjected to a technical, economical, or other classification as well as nomenclature so that they do not interfere, intersect or mutually impair each other.
8. Device in which on an upper and/or lower part at least one loop is provided which can be locked as a theft proofing measure by a lock in such a way that the top part can no longer be attached to or be separated from the bottom part or anything else brought between or into them or on the other hand conversely must even extra.

9. The loop can be locked or opened with a screw, nut, nail, needles, thread, button and nut, with a lock, with a loop itself. The loop or the screw head may in turn be locked with another loop, cap or lock mechanically and/or electronically.
10. The numbers may alternate or be combined with a time number or be plugged in or be made recognizable only with a/(its) code (name) or can be generated or exist according to an internal or external algorithm. In particular for watch dials or other indicator systems which can carry EPC tags (mini microchips) such auto-numbers are simplest to integrate. In the case of expensive products or parts (e.g. expensive watches, an EPC tag can be integrated precisely into the most expensive part or several parts.
11. For locking/encryption of the loop and/or lock the product can be combined or separated with the interface and a person. The loops, products, persons etc. can all be nested one inside the other.
12. As loops one may also use cables which, in particular, are woven/laced like coaxial cables but with insulation so that short circuiting in a very small space is no longer possible and also the cable, firmly stabilized like a safety cable, is difficult to separate/take apart.

Electronics/radio

13. For stationary (electronic devices, houses, plants) products cables are installed as electrical circuits in the loop (e.g., EPC tags) around, in, on, for, etc. the products (the cables may themselves again possess locks or be lockable electronically and can be located with a transponder or (SIM card) radio interface.
14. In GSM UMTS-radio-free zones (underground garages, tunnels, mountains, cities, forests) W-LAN (access point), Bluetooth, wireless (local) loop or CB radio nets may assume coverage for the radio interface which are also locked and trigger an alarm locally or to a central or a mobile phone.

15. The antenna required for the (GPS, GSM etc.) radio reception is integrated in the loop and can be plugged inside or outside on the mobile or stationary object visibly or invisibly and identified non-(destructibly) or destructibly and integrated in the loop or number!
- 5 16. The radio interfaces have several loops, or a loop has several radio interfaces, which are so arranged so as to make it (no longer and) possible to devise an exactly definable electric current or circuits. It can be said (not with one technique) how many and what kind of radio interfaces are integrated! The same is true for the feed.
- 10 17. The arrangement of the numbers, the lock and the loops, transmitters and chips can be so easily constructed and configured that, although they function for years without damage, in the case of very minor damage they are destroyed or trigger an alarm. The loop, the number, the electric circuit in this way can also form a unit with the number like, e.g., a watch dial. The lock itself may form such a unit as well as any other arrangement with a loop such as screws, nuts, nails, needles,
15 threads, buttons, rods, rivets, ring, plate, ball or box with loop and number.
18. In the case of the lock or a ball or box the latter can also additionally be locked with a normal key system or with or without radio transmission (electronically). From the lock, especially the ball or box then cables or loops emerge as loops which inside the ball or box possesses a protected transponder, transmitter or transmitter.
20 The box or ball itself may be formed from several loops or be protected with them.
19. The individual cables or loops with insulations around the wire can be twisted or woven (like a coaxial cable) so that between the outlet and the inlet of the cable at the transmitter or the safety box no access to the cable itself is possible any longer for short circuiting the same. The transmitter can even be integrated inside the
25 woven cable, and the individual cables may be antennas.
20. The locking of the loops and numbers can be used for monitors and radio, TV, W-LAN, telephone etc., receivers and transmitters that receive or transmit other or the

same encrypted and unencrypted signals. The signals may be transmitted separately, individually or together or in a combination thereof!

21. The electric circuit in the loop can also be opened together with or without the loop in order to insert other loops and circuits or to enable an access to a locked part or a box or through a passage such as (car) doors etc.
22. The code encryption can take place via an external or internal, actively switchable-on or passively always switched-on algorithm with special software on special hardware.
23. Simple (electronic) connections (loops) from transponders in products can also go to the peripheral part with or without numbers. Thus, for example, in the case of computers or laptops all peripheral parts (drives, plug-in cards, chips, cooling devices) can be covered and tested for completeness and/or presence. The Microsoft PIN identification solutions may be used for this purpose.
24. Besides the internet itself, radio interfaces and devices, cell phones or mobiles as well as stationary W-LAN or RFID transponder devices can store and administer the numbers.
25. The loop with the number, besides the electrical circuit, may also be only an information (circuit) (e.g., locking, a code, a signal or just information), which, e.g., besides matter as a carrier contains information via light, sound, another physical or para-psychological medium. For example, every photoelectric barrier can be locked with a light wavelength code, or any magnetic or electrical potential field can also form loops.
26. W-LAN, GSM etc. transponders may receive RFID-EPC tag signals. RFID-EPC tags receive and transmit in the W-LAN frequency range and may be locked mechanically, electronically, locally, temporally, legally or a combination of these with an encryption algorithm and have a tracking or registration function with number on the internet.

Cell phones with EPC transponders and fingerprint sensors

27. The encrypted code (firewall) can be transferred from a biometric (PIN, fingerprint, acoustic signal, iris print) code or a combination of these. The recognition can be fed back vice versa.
28. The biometric code for locking the loops or numbers can be transmitted via a car key (central lock), mobile telephone or other transponder that carries a sensor pad for fingerprint recognition and has a sensor camera for iris recognition.
29. The sensor camera searches one or both black pupils and white eyeballs with iris or an installed or integrated EPC tag in the face, eye, retina, cornea or lens that is placed with at least one EPC tag on the eye. The EPC tags may be surgically implanted or lasered into the eyes. The EPC tags can project video images directly onto the lens and show directions that are directed into the macula of the eye.
30. Cameras in cell phones have a sensor with software which like a movable eye itself centers the headset in the case of video telephone conversations or centers another reference point always the face, body or another desired viewing angle (e.g., on a special EPC tag as well as with number on the internet).
31. The locking/encryption with a loop and/or lock is actuated via a radio signal (GSM, CB, FM, IR, UV, UHF etc.). In this case a certification code is sent to the product via an interface (cell phone with RIFD transponder, key, etc.). The radio interface, i.e. cell phone is and has itself like the product the or a second, third etc. loop with number. On the interface in turn another interface is installed and encrypted as (loop) with or without the first radio interface's being or used as a lockable loop etc. (e.g., key combined with mobile phone). All interfaces and products or only parts of them may be combined and adjusted individually or according to a preset algorithm. From the key a signal can be given to the mobile phone or vice versa which can or must be operated according to a preset algorithm.

32. The lockable DSS or the chip with the loop can be equipped or combined with an avalanche searching device in cell phones or another radar search function, direction indicating techniques to EPC tags, GSM chips or GPS transmitters, Recco-reflectors and transmitters etc., e.g. in cell phones, skies, snowboards, ties/links, boots or clothing or all other products.
33. Products (radio interface) with the Lock-Loop DSS feature can transmit via W-LAN, GSM, GPS or all other radio chip (CB, walkie-talkie 446 MHz, Barryfox 457 kHz). The individual channels may in turn be locked and encrypted. Cell phones, walky-talkys etc. for multiradio (transmitting and receiving or location and locking) units can be fused together. In this case any combination of transmitting/receiving units can be chosen, whether UHF, GSM, Bluetooth, satellite telephone, DPS, DECT fixed net telephony.
34. (Radio interfaces) have both a hardware and also a software solution for the adjustment of the cheapest or best or individually desired sequence of the most suitable clarification of the forwarding of the lock, of the code, of a search function as well as a conversation whether via UHF, GSM, Bluetooth, satellite telephone, GPS, DECT or fixed net telephony. Several radio interfaces can be connected in series through several stations to enable forwarding to each other.
35. A receiver/transmitter combined with a cell phone can detect, locate, track and process the Lock-Loop or EPC tag chips. This goes through several receivers/transmitter systems (W-LAN, GSM, UHF, Bluetooth etc. The locks or authorization for Lock-Loop chips or EPC tags can be given/guided biometrically or via other authorizations from cell phones or internet-(platform).
36. The same locked numbers on the internet etc can be intermediately transferred to an independent computer/laptop/PDA/cell phone and administered without having a constant internet connection. Special memory caches store all movements or interactions with EPC tags or RAM caches, and functions are integrated in the radio interfaces.

37. For cell phones or all other PDAs etc. the numbers can be managed on an internet site such as downloaded for a “friend finder function” on cell phones, PDAs, laptops or vehicles. The “friend finder function” is a direction indicator of the type of a compass to friends or products with EPC tags in the environment or to certain places which permits the location of friends/enemies/all products and other tags or microchips, transmitters such as television transmitters or channels or loops! Naturally in this way also the loops with the numbers can be tracked! Everything can be found as well as plugged individually locked! An extra function permits every EPC tag to be tracked with it in and via several radio interfaces at defined distances.
38. 4G cell phones have the loop-internet signal-radio tracking and locking feature, i.e. today’s cell phones like the EPC tags still do not have the important locking feature (which hereby is clearly and distinctly claimed). Also GPS transponder devices or solar cells (feeds) can also possess the lockable loops (with numbers on the internet).
39. Biometric factors such as fingerprints, iris prints or voice recognition patterns as well as biological, biochemical, physiological or genome values may be taken as number and/or loop.
40. The numbers for unlocking or locking EPC tags in the products or combined with them or products integrated in them as well as all lockable products with transponders can also be entered/input by a person from memory or a data bank as well as in combination with another electronic, mechanical, physical, biometric speech code and/or via an authorization interface such as a cell phone.
41. The biometric signal of the number as an encrypted code (firewall) can be entered in the product to be locked, protected or tracked directly or indirectly or in the radio interface (cell phone) or both simultaneously.

42. A simple menu guide, similar to cell phone address lists, for a Lock-Loop list of all products, chips, EPC tags to be locked and tracked, is integrated in the radio interfaces or cell phones, which is guided with a fingerprint on the visible display sensor and executed with one or more simultaneous fingerprints and/or biometric signals.

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Stand alone solutions for vehicles or mobile products:

43. The open (Lock-Loop DSS) loops or EPC chips are integrated in vehicles as stand-alone devices or at the factory into the vehicles, motors, cable tree, or other parts such as radios, wheels, trailers, etc. In this case, however, the standalone device can also be plugged by the automobile owner/garage operator himself in his own vehicle! The standalone device has a receiver/transmitter from/to for alarm signals from the central radio lock and/or from the loop or chips with movement sensors or photoelectric barriers and a DSM, W-LAN or other radio transponder. In the vehicle (but also in all other products connected to/nested in it), one or more EPC tags are built or plugged in (e.g., in the engine, etc.). In addition to doors, also windows, convertible tops, trailers, etc., or other parts the products can be locked and tracked.
44. The Lock-Loop DSS stand-alone device in vehicles or all other products transmit as long as they are not stolen. After this only after authorization by the owner the devices emit short signals so that the thief cannot search for and destroy the device. In the case of locking the devices register the location by positioning to the GSM, GPS and other transmitters and if an unauthorized movement or interruption passes a loop an alarm signal is sent out.
45. Even without a radio device the EPC tags in the vehicles are sufficient to trigger an alarm signal in the case of unauthorized destruction of the loops or movement out of a defined radio range via another radio device in another vehicle or at the edge of the road or via someone else's cell phone, etc.

46. Combination of a process for a device such as a cell phone, PDA or laptop which simultaneously and/or successively independently of one another subsequently has biometry, fingerprint or speech recognition or numbers and/or other individual, personal key, code or password authorization for a “lock or open car, etc.” function.
5 This command is sent via an RFID transmitter in a radio interface or cell phone to the EPC tags.
47. Software in the Lock-Loop DSS stand-alone device regulates and stores all received signals from the EPC tags surrounding it. By repeated locking of all EPC tags these can be brought together, thereby defining a single product. By a homologization
10 function other EPC tags can be included or removed.
48. For bicycles a double or triple buckle with loops is affixed to the frame, which can be integrated in the frame or other components, which themselves may be loops or locks (e.g. hubs, axles, rims, seat, handlebars, hand grips, brakes, tires). In particular hub locks can be equipped with the anti-theft system!
- 15 49. Conventional bicycle locks (fork, chain or cable locks) have a GSM, GPS or EPC tag transponder integrated for location and for electronic locking of the lock. For bicycles or other locks and products not supplied with current the current supply is integrated in the hub or rim as a motion dynamo, or a magnetic disk (e.g., in the disk brake) in the wheel as an induction current generator. A movement sensor
20 sounds an alarm in the case when the bicycle is carried away or in the case of its destruction. When the current is interrupted or deflected an alarm sounds. In the case of unauthorized removal of EPC tag-equipped components such as saddles, wheels, brakes etc. there is also an alarm. Every GSM, GPS or EPC tag transponder can be combined individually for a product, locked and tracked via the fingerprint
25 sensor radio interface or the internet.
50. For mobile products (vehicles (stand alone solution), bicycles, laptops, projectors, etc.) the radio antenna may be installed plugged outside or inside visibly or invisibly. The hardware disk and the transponder or SIM card as receiving module

- are connected, together or separately, in two or several stages via encoded radio connections or with the radio antenna or antennas. The transponders, SIM cards, disks and radio antennas may themselves be encrypted/locked to each other. In particular, in products with radio and information nets be connected to trans-
- 5 ponders, to EPC tags with transponders to GSM, W-LAN nets.
51. On a (Lock-Loop DSS or EPC tag information) internet platform via computer, laptop, PDA, cell phone or radio interface all other personal, biometric, technical etc. data can be entered, administered and locked. For laptops, PDAs, cell phones and all other products with LL radio feature a license from me is required.
- 10 52. For (business) operation of the (Lock-Loop DSS or EPC tag information) internet platform etc. an international hotline is needed to answer and solve the questions and problems of the customers. Various organizations and institutions may also receive limited access to the internet platform.
- 15 53. The Lock-Loop DSS with transponder to GSM net and GPS satellites and transponders with EPC tags can be integrated as a stand-alone solution directly in (car) batteries, wire harnesses, doors or ignition (locks) or engines. In this case the “stand alone” solution is installed plugged by the installer himself (driver, garage mechanic) anywhere with one or more transponders. The EPC tags may themselves receive data and information on operation and function via radio.
- 20 54. For vehicles or laptops or all other single or multi-part products with installable transmitters/receivers other tags (microchips) can be incorporated as Lock-Loop DSS in engines, radios, wheels, chassis, mechanical or electronic components etc. so that they cannot be stolen or broken out. For this various transmitter/receivers are installed in parallel or serially in the products. In particular, every transmitter/
- 25 receiver can be locked or coded with its loop and number and possess its own number on the internet which in turn is locked or coded.

55. In the case of vehicles the GSM, GPS or EPC tag transponders report all vehicle data (such as tank level, emissions, etc.) to receivers on the roads, crossings, bridges, tunnels and the *Autobahn* [4-lane highway] access roads, toll booths, etc, whether everything is correct. *Autobahn* drivers and police are informed directly if a vehicle gets onto the Autobahn as a ghost driver. In fog, slippery ice, accidents behind invisible curves, in the case of accidents and traffic jams, etc. a signal is transmitted to the following vehicles.
56. Traffic jams are reported backward from vehicle to vehicle and managed until the traffic jam is relieved with RFID transponders at the edge of the road (combined with GPS etc.). Driving goals may be entered (acoustically etc) and lead via the internet and software to breaking up traffic jams or even preventing them, because such a high traffic volume is immediately registered and reported. An RFID etc. black box registers all movements. By means of a point of emphasis calculation from driving data of the vehicles, from the braking paths via the cache memory the maximal speed and the vehicle spacing and hazardous driving situations at construction sites, in fog, rain and before dangerous curves can be calculated, determined, reported or even prevented. Excess traffic can be reported to the driver and above all demonstrated in a legally binding manner.

Safety/rights/special functions

57. The radio interfaces or cell phones have both a locking and/or a searching function for products with certain EPC tags with direction indicators etc., that are adaptable to one's own/someone else's products and/or for one's own/someone else's property, new/old, cheap/expensive, electronic/physical, human/animal/physical original/counterfeit. The locking can also function from cell phones (via the internet) on stationary as well as mobile products, doors, etc.
58. The radio interface and cell phones recognize the EPC tags that are integrated in the brand label or logo, in writing or by symbol or only the base or a price bar code, in which case the latter are adjustable with other functions as only locking to original/

- counterfeit recognition, i.e., it can be combined with anything else such as with light (video), sound (music), movement (fresh, packaging, heat, time, storage) of consumer goods and above all foods etc. with EPC tags. Every EPC tag is registered by one of us via the internet, and secure sites (can) be tested with the label lists, locked and tracked.
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59. The radio nets are also information nets via EPC tags and cell phone radio interfaces. The radio interfaces (antennas) may themselves be connected encrypted by radio or be connected encrypted via loops! The information on the EPC tag net can be locked or/and referred to for other applications by individuals and companies as well as colonies of animals, humans or above all the products themselves.
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- Statistics from products and net operations, like all newly accumulated information from the connection with the Lock-Loop project, belongs to the finder or inventor.
60. Weapons, articles of value, instruments, body, vehicle or aircraft parts, buttons, tear seals, bands/ribbons, threads may contain a Lock-Loop or EPC tag chip which gives via a radio interface a signal to a number on the internet for checking the owner, property, physical data, wear, return expiration date and blocking. The idea and purpose is to enable the company and individual to make a simple check of all applied rights of one's own and obligations of others.
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61. The loops can be locked/authorized not only for one product but also for the site, a time point or time span, the owner, a right or an obligation (e.g., for reasons of data protection).
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62. Coins, paper money and credit cards can also be equipped with a (lockable) loop, a microchip or transponder and be stored with additional information on time, place, past, owner. All personal data can be called up on the lockable EPC credit card. In the event of destruction of the coins, paper money or credit cards in the case of unintentional destruction the data and values can be restored or in the case of criminal destruction the data and values are blocked until an official declaration. The coins, paper money and credit cards can therefore either be officially devalued
- 25

or revalued. Any transaction of any coin and any bank note can be followed in the cell phones themselves and detected via the internet. Counterfeit money is no longer possible.

- 5 63. The (cell phone) radio interfaces as well as internet servers have quite special history caches which registers, manage, and indicates all transactions from EPC tags (money, products) according to entirely different criteria (type, time, distance, quantity, cost, individual preferences). In particular, anyone can subsequently follow and check his transferred EPC tags, even if his cell phone is lost, the other cell phones or caches in the EPC tags themselves take over because they also store and lock their numbers for an indefinite number of users.
- 10 64. The numbers on the loop can be visible or invisible, characterized physically recognizable with another recognition method, and themselves be loops or the loops be a number, an information part or whole combined with functions, codes, tasks, obligations, rights, specifications.
- 15 65. For reasons of environmental protection and pledge security all products when sold are brought into a relationship with a code number in the loop to the purchaser and owner. In the case of disposal in (public) cans, dumpsites or of destruction, transmitters can also (register) each loop (EPC tag). From this entire material flow or logistic scenarios for products, brands, firms can be administered and marketed.
- 20 66. The products can be managed via an internal or external electronic locking systems (much as the key to the lock forms a unit) (the loops can, after all, possess different (settable) numbers). That is, cell phones, fingerprint sensors, video cameras, which have a locking, authorization or other function with the other products with loops and numbers, form a unit or may naturally be separately individually viewed, used or employed. For example, cell phones, cameras, tape recorders can be placed in
- 25 vehicles, theaters, concerts, lectures, sporting events etc.

67. In or on all private or public buildings RFID identification transmitters can be installed which register the EPC tags. Thus in entrance halls of railroad stations or on *Autobahns* and at airport terminals identification transmitters can be set up permanently or also as mobile units may run themselves via any cell phone.
- 5 68. The Lock-Loop DSS can be equipped and authorized products be used for authorization of internet, banking, property, legal accesses or for voting, elections and the like.
69. A special button or function on the cell phone etc. permits EPC tag, product or friend to receive information in 1 cm to 10 cm or 1 m etc. distance. This
10 information is stored in a management cache according to (time, length, site, index, importance, features, wishes). A special button or function on the cell phone to allow the radio and TV channels and volumes to move forward, trigger alarms or a high voltage shock (in the case of certain or corresponding EPC tags) for dangers such as allergies, weapon possessors or in the case of dangerous persons, released
15 animals, etc., e.g., dogs themselves.
70. On the Lock-Loop DSS via cell phone, PDA, laptop interfaces special services can be set such as the location of friends or enemies so that in the case of getting closer or further away or in the case of disappearance an alarm is triggered or another signal is transmitted, e.g., when a locked electrical potential field is entered!
- 20 71. The lockings/authorizations for the loop or EPC tags (chips) can be adjusted individually or for groups or products (e.g. for special advertising on roads, in malls, buses, trolleys, trains, etc., the cell phone headset can be adjusted according to individual view points or it emits an alarm when a criminal with a weapon appears or satellite controlled etc. movements or tours are possible through
25 (product) parks. A button or a function takes over the cell phone or head set adjustment for TV, radio, RFID, telephone or radio reception.

- 5 72. Immediate or momentary recording of evidence with video or photographic recording (with flash) and in the surrounding area all EPC tags instant storage which also is locked directly with the number with copyright protection on the internet. This results in a simple and ingenious “time witness”, authenticity and proof standard.
73. Combination of a cell phone (radio interface) with stand-alone solution for vehicles or EPC tracking and locking. Additional functions such as garage door openers, cameras, etc., are further integrated.
- 10 74. All (e.g., for data protection and authorization reasons) loops with numbers without numbers on the internet are (themselves) lockable or on an internet site one can have all his lost products locked and published for tracking with alarm and reporting function to a great variety of parties. Radio interfaces (cell phones) and all GSM, W-LAN transponders will track all loops and numbers world wide.
- 15 75. All claims of this patent are combined with the claims of my video hit list patent and respectively combined with the claims of this patent itself.
76. Any combination of any patent, right, with this patent or with its own claims, descriptions, sentences, words is (also) possible.